oil, or whether it is this more complicated equation that we have today, the overall supply, if we can increase it, we will lower the overall cost of energy.

Now, some will be more competitive. Some will be less competitive. And as technology develops, it will change that as well. But growing the size of the energy pie is an essential thing for us here in America. We need to work on it every way we can. And that is why I say we need to drill in ANWR. We need to drill in the Outer Continental Shelf, both places, for gas and for oil.

We need to expand our ethanol and our biodiesel dramatically. And we have been doing that, especially in my district. And I am quite grateful and proud of the work that has been done there. The industry essentially has been developed, home grown. We looked at ADM and Cargill and would like to have had them taking the lead on ethanol production in America, and they have producing ethanol for quite some time. They are actually, at least one, and perhaps both, building a new plant or two around the country, perhaps more than that. But they didn't jump into this with the idea that they were going to create a market and then supply that market of ethanol or biodiesel.

And so, seeing the vision of this, and watching the brain child grow from within the region of the country that I come from, I happen to have shook the hand of the man who pumped the first gallon of ethanol in the United States of America the other day, State Senator Thurmond Gaskill from Corwith, Iowa. And I know they worked on that for years and years before they could get to the point where they could pump the first gallon of ethanol.

And now, in this congressional district that I represent, we are sitting there either in production for ethanol, under construction or on the planning stages and soon going into construction, we will be at, by the end of next year, 14 ethanol production facilities in the 5th Congressional District, the western third of Iowa. We will be at least five biodiesel production facilities in the same district in those 32 counties.

Now, those 14 plants will pretty much have the whole region, then I will say polka dotted with those locations where they can draw the maximum amount of corn to those plants. And we have an ability perhaps to go up to, I will say, a third or maybe even as much as a half, half of our corn crop going into ethanol. But the balance of that comes back in the form of feed. So you will see a truck come in to an ethanol plant with a load of corn on it, and he will go through and dump that load of corn in the pit; and while he is sitting there dumping that load of corn, as it is being augured out, right in the next bay you will see a truck pulling in to load a load of DDGs, dried distillers grain, high-protein feed stock that is a by-product that comes out of the ethanol production. And that goes off to the feed lots to be fed to livestock.

Then there is also CO_2, a by-product that also gets marketed for an industrial market. So we capture almost everything in there. And the corn comes in. And then out of that corn we take, make the ethanol out of the starch; and we send the protein to the feed lot in the form of dried distillers grain, and capture the CO_2 as a by-product and market that in the industry; and that process goes over around and around again.

Now, you have University of California Berkley and another institution joined together, or at least had concurrent reports that said that the production of ethanol takes several times more energy to produce than you actually get out of a gallon of ethanol.

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And I looked at that. I did not actually read the study. It was not worth my trouble to do that. And I wondered why anybody would go to UC Berkeley to get some answers on ethanol when you could come to the Iowa State University or the University of Iowa or University of Northern Iowa or some Minnesota institutions where we have experience with ethanol, where we actually understand what goes on there, and we can give you some empirical data on the cost of the energy to produce ethanol.

So I began to ask those questions, and one of them is how much energy does it take to produce a gallon of gasoline from crude oil? And it works out that if you are going to measure the BTUs, for the BTUs that would be in a gallon of gasoline, you only get eight-tenths that much out of it when you process and crack that out of crude oil. So does it take a gallon of gas to produce a gallon of gas? No. It takes a gallon of gas to produce 80 percent of a gallon of gas is the way they would calculate that.

And ethanol works out far better. Once the corn is at the plant, and you have that in storage, and you process that through, if you consume the quantity of BTUs that are in a gallon of ethanol, you will produce 3 gallons of ethanol with it. Just a skosh less than that, but the numbers are coming right at 3.

So the return on energy is far more efficient to produce ethanol than it is to produce gas even out of crude oil. And all the energy has a composition component like that. It costs something to put it into a commodity that one can transfer, put into a tank and efficiently get a burn.

So, Mr. Speaker, the goal here is let us lower our energy prices in America by growing the size of the energy pie. Let us expand the utilization of our clean-burning coal technology. We have an almost unlimited supply of that. Let us dramatically expand our ethanol. Let us take the entire Corn Belt and build out ethanol production all the way across the Midwest and as far south as they can compete in the corn production down there, and then, on top of that, continue to build our biodiesel production facilities out. The five that are in my district, that can go to 10 or 12 or 13 plants within the next 4 to 5 years. I actually expect it will go there. And the biodiesel production that we produce, every time we do that, it shuts off another shipment of crude oil into the United States from the Middle East.

But I would say grow the size of the energy pie. Change the size, the proportion of the pieces. Let us shrink this piece, 10.8 percent of crude oil. Let us shrink this piece of natural gas, but let us grow the supply of natural gas dramatically so we can afford to grow it if we need to and save our fertilizer industry, which is very close to have all been pushed out of the United States because we are unwilling to develop our natural gas supplies. So we put Hugo Chavez in a situation where he could potentially be controlling the food supply in the United States by controlling the fertilizer that is made down there out of the natural gas that they have. Now, thankfully, we have some U.S. companies that are set up in Trinidad, Tobago, and as long as that would remain stable, they will be able to supply us fertilizer there more reliably and more stably than they would have out of Venezuela.

But then, as I said, expand the coal, expand the biodiesel, expand the geothermal. Expand the solar to the extent that it is economically feasible to do that. We are continuing to expand the wind. That is a renewable resource. And as our technology goes forward, we get a lot better return out of our capital investment there. This biomass, of course, is ethanol and biodiesel.

The hydroelectricity, I would love to build a few more dams in America, but I just cannot see a way that we can crack that environmentalist nut at this point. But at least maintain this, expand it if we can, because that is a renewable resource. It is as clean as any energy that you get.

Our nuclear capability, Mr. Speaker, it is amazing to me that it has been over 30 years, that I know of, that we have at least begun the construction on a new nuclear production facility in the United States. Those facilities are coming off line, and some of them are starting to reach the end of their life. We need to develop more nuclear energy, generate more electricity with nuclear. It is safe technology. It is the safest technology from a statistical basis than anything that we produce in America. You cannot generate electricity out of diesel fuel or natural gas or coal with as low an accident rate as you have out of the nuclear, Mr. Speaker. So I would say expand this percentage of nuclear.

Reduce the natural gas for electrical energy, but expand it for fertilizer production so our food supply is up, and